

REMARKS

In the above-identified Office Action the Examiner again relied upon a hypothetical combination of the cited Kataoka and Ohta patents for rejecting the claims as being obvious under 35 U.S.C. 103. In this regard, the Examiner correctly noted in the first complete paragraph of Page 3 of the Office Action that the primary rejecting reference, the Kataoka patent, does not teach that the dissolved UV absorbing agent has a concentration gradient in the direction of thickness of the encapsulant resin. As already pointed out during the previous prosecution of this application this lack of disclosure prevents the Kataoka patent from being a rejecting reference when taken alone.

As discussed in earlier-filed Amendments, a key feature of the present invention is that an ultraviolet absorbing agent is dissolved in an encapsulant resin with a concentration gradient such that the concentration of the ultraviolet absorbing agent is higher at a light incidence side of the encapsulant resin. By these means, the amount of the additive of the ultraviolet absorbing agent can be minimized, and volatile components thereof, generated when melting the encapsulant resin in the resin sheet lamination step, are reduced (see Page 7, lines 19-26 of the Specification). Accordingly, degradation of the encapsulant resin and of the underlying photovoltaic element, due to ultraviolet light, is effectively prevented.

To overcome this shortcoming of Kataoka as a rejecting reference, the Examiner relies again on the Ohta patent on the alleged grounds that Figs. 4 and 5 of that patent, together with the accompanying text, discloses a semiconductor element 5

encapsulated with a resin 2, wherein the encapsulated resin comprises an additive 18 having a concentration gradient in the direction of thickness of the encapsulant resin 2.

Applicants respectfully disagree with this analysis. Instead, Applicants point out that the purpose of the Ohta patent is to improve the mold releasing property of an encapsulant resin without impairing its adhesiveness to a semiconductor chip. To this end, Ohta distributes a mold releasing agent in a higher concentration on the mold-contacting surface in an encapsulant resin sheet, or distributes an adhesive in a higher concentration on the semiconductor chip-contacting surface in an encapsulant resin sheet (see Col. 11, lines 38-66).

With this in mind, Applicants respectfully submit that the gradient of the mold release substance in Ohta, in order to keep that substance away from the item being encapsulated, does not suggest distributing an ultraviolet absorbing agent in an encapsulant resin with a concentration gradient in a thickness direction and making the concentration of the ultraviolet absorbing agent higher at a light incidence side of the encapsulant resin, in order to minimize the required amount of the additive.

Accordingly, Applicants submit that there is no suggestion in the prior art to combine Kataoka and Ohta. Moreover, Applicants also submit that it is improper to rely on Ohta in attempting to overcome the deficiencies of Kataoka as a rejecting reference, when Ohta uses a different additive, for a different purpose, in a different structure. In the absence of any suggestion in the prior art to combine such references, it must be concluded that such a combination would require the improper use of hindsight.

As a final point, Applicants have remedied the deficiency of Claim 31 which was kindly identified under the Double Patenting rejection on page 2 of the Office Action. That is, the rejection of Claim 31 has been overcome by amending it to depend from Claim 30 instead of Claim 27.

For all of these various reasons Applicants respectfully submit that this application is in condition for allowance and a formal Notice of Allowance is solicited.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our address given below.

Respectfully submitted,



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